Lampiran 1. Keterangan Kelaikan Etik

KEMENTERIAN RISET, TEKNOLOGI, DAN PENDIDIKAN TINGGI
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KETERANGAN KELAIKAN ETIK
("ETHICAL CLEARANCE")

No. 76 / EC / KEPK / 03 / 2016

KOMISI ETIK PENELITIAN KESEHATAN FAKULTAS KEDOKTERAN UNIVERSITAS BRAWIJAYA, SETELAH MEMPELAJARI DENGAN SEKSAMA RANCANGAN PENELITIAN YANG DIUSULKAN, DENGAN INI MENYATAKAN BAHWA PENELITIAN DENGAN

JUDUL	:	**Peran Kurkumin Terhadap Perbaikan Fibrosis Hati dan Hipertensi Portal Gastropati pada Tikus Model Fibrosis**
PENELITI UTAMA	:	**dr. Supriono, SpPD KGEH**
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UNIT / LEMBAGA	:	**Fakultas Kedokteran Universitas Brawijaya**
TEMPAT PENELITIAN	:	**Laboratorium Fisiologi dan Patologi Anatomi Fakultas Kedokteran Universitas Brawijaya**

DINYATAKAN LAIK ETIK.

Malang, 11 MAR 2016
Ketua,
Komisi Etik Penelitian Kesehatan

Prof. Dr.dr. Moch. Istiadjid ES, SpS, SpBS (K), M.Hum
NIP. 19460516 197111 1 001

Catatan :
Keterangan Laik Etik Ini Berlaku 1 (Satu) Tahun Sejak Tanggal Dikeluarkan
Pada Akhir Penelitian, Laporan Pelaksanaan Penelitian Harus Diserahkan Kepada KEPK-FKUB Dalam Bentuk Soft Copy. Jika Ada Perubahan Protokol Dan / Atau Perpanjangan Penelitian, Harus Mengajukan Kembali Permohonan Kajian Etik Penelitian (Amandemen Protokol)

Lampiran 2. Pelaksanaan Penelitian

Keterangan Gambar: A. Proses Adaptasi Hewan Coba, B. Pembuatan Bahan Pakan Hewan Coba, C. Injeksi CCl4 Intraperitoneal, D. Pemberian Kurkumin Per Oral, E. Pembedahan Hewan Coba, F. Evakuasi Organ Lambung

Lampiran 3. Data Kadar MDA dan Aktivitas GPx Jaringan Lambung

Perlakuan	Tikus	Massa Jaringan Lambung	ABS	MDA (nM/mg protein)	ABS	GPx (unit nM/menit/ mg protein)
K-Neg Diinjeksikan NaCl 1cc 2x/minggu selama 9 minggu	1	500 mg	1,102	2,778125	0,923	251,871
	2	500 mg	1,136	2,884375	1,135	219,073
	3	500 mg	1,123	2,84375	1,049	212,725
	4	500 mg	1,117	2,825	0,930	267,212
K-Pos Diinjeksikan CCl4 1cc 2x/minggu selama 9 minggu	1	500 mg	1,05	2,615625	0,634	396,48
	2	500 mg	1,166	2,978125	0,568	502,676
	3	500 mg	1,218	3,140625	0,555	459,308
	4	500 mg	1,23	3,178125	0,664	399,816
KK-2 Diberikan sonde pelarut kurkumin selama 2 minggu	1	500 mg	1,44	3,834375	0,761	315,46
	2	500 mg	1,036	2,571875	0,665	267,52
	3	500 mg	1,004	2,471875	0,805	337,39
	4	500 mg	0,952	2,309375	0,889	379,72
KP-2 Diberikan sonde kurkumin (200mg/kgBB) selama 2 minggu	1	500 mg	0,93	2,240625	0,593	231,31
	2	500 mg	0,987	2,41875	0,673	271,6
	3	500 mg	1,065	2,6625	0,713	291,49
	4	500 mg	1,131	2,86875	0,667	268,54
KK-5 Diberikan sonde pelarut kurkumin selama 5 minggu	1	500 mg	1,169	2,9875	0,421	145,29
	2	500 mg	1,064	2,659375	0,456	162,8
	3	500 mg	1,097	2,7625	0,367	118,43
	4	500 mg	1,079	2,70625	0,436	152,94
KP-5 Diberikan sonde kurkumin (200mg/kgBB) selama 2 minggu	1	500 mg	0,65	1,365625	0,712	290,98
	2	500 mg	0,772	1,746875	0,823	346,57
	3	500 mg	0,805	1,85	0,593	231,31
	4	500 mg	0,992	2,434375	0,644	256,81

KK-9 Diberikan sonde pelarut kurkumin selama 9 minggu	1	500 mg	1,134	2,878125	0,324	96,84
	2	500 mg	1,145	2,9125	0,514	192,04
	3	500 mg	1,239	3,20625	0,366	118,09
	4	500 mg	1,122	2,840625	0,419	144,61
KP-9 Diberikan sonde kurkumin (200mg/kgBB) selama 2 minggu	1	500 mg	0,982	2,403125	0,315	92,59
	2	500 mg	0,607	1,23125	0,450	159,91
	3	500 mg	0,558	1,078125	0,390	129,82
	4	500 mg	0,618	1,265625	0,338	103,81

Lampiran 4. Skoring Histopatologi Lambung

KELOMPOK		RERATA SKORING DALAM SETIAP PARAMETER					RERATA
		A	B	C	D	E	
KN	1	0,4	0,2	0,6	0,2	0,6	0,4
	2	0,6	0,6	1,4	0,8	1,2	0,92
	3	0	0	0	0	0	0
	4	0	0	0	0,2	0,55	0,15
							0,3675
KP	1	0,4	0,6	1	1,2	1	0,84
	2	0,8	1,2	0,4	2	1	1,08
	3	1	0,4	1	2,6	1	1,2
	4	1,4	1	1	2,2	1	1,32
							1,11
KK2	1	0,8	0,8	0,2	1,2	0,6	0,72
	2	1	1	0,8	1,2	1	1
	3	1,6	1,2	1	1,6	1	1,28
	4	1,8	1	0,6	1	0,8	1,04
							1,01
KP2	1	1,67	0,5	1	2	0,6	1,154
	2	0,8	0	0,89	2,67	0	0,872
	3	0,67	0	0,67	2,167	1	0,9014
	4	0,167	1	1	2,167	0,83	1,0328
							0,99005
KK5	1	1,4	0	0	1	1	0,68
	2	2	0	0	1,2	1	0,84
	3	2,4	0,8	0	1,2	1	1,08
	4	2	1	0	1	1	1
							0,9
KP5	1	1,6	0,6	0	1,2	0,6	0,8
	2	2	0	0	1	1	0,8
	3	0,4	0,6	0,2	1	0,8	0,6
	4	2	0,2	0,4	1,4	1	1
							0,8
KK9	1	0,6	1,2	1	2	1	1,16
	2	0,8	1	1,4	2	1	1,24
	3	0,8	1,2	0,8	2	1	1,16
	4	0	1	1	2,6	1	1,12
							1,17
KP9	1	2	0,4	1	1	1	1,08
	2	2	0,83	1	1,167	1	1,1994
	3	0,5	0	1	1	1	0,7
	4	2,67	0,33	1	1	1	1,2
							1,04485

Lampiran 5. Hasil Analisa Statistik

5.1. Uji Asumsi Normalitas

Explore

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Residual for MDA	24	100.0%	0	.0%	24	100.0%
Residual for GPx	24	100.0%	0	.0%	24	100.0%
Residual for Hispatologi	24	100.0%	0	.0%	24	100.0%

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Residual for MDA	.154	24	.143	.951	24	.284
Residual for GPx	.095	24	.200*	.980	24	.904
Residual for Hispatologi	.107	24	.200*	.980	24	.899

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

5.2. Uji Asumsi Homogenitas Ragam

Levene's Test of Equality of Error Variances[a]

Dependent Variable: MDA

F	df 1	df 2	Sig.
.556	5	18	.732

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+Kurkumin+Lama+Kurkumin * Lama

Levene's Test of Equality of Error Variances[a]

Dependent Variable: GPx

F	df 1	df 2	Sig.
.820	5	18	.552

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+Kurkumin+Lama+Kurkumin * Lama

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Hispatologi

F	df 1	df 2	Sig.
.781	5	18	.576

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+Kurkumin+Lama+Kurkumin * Lama

5.3. Uji t independen

T-Test

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
MDA	KN	4	2.8328	.04408	.02204
	KP	4	3.0563	.12178	.06089

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
MDA	Equal variances assumed	15.990	.007	-3.450	6	.014	-.22344	.06476	-.38189	-.06498
	Equal variances not assumed			-3.450	3.773	.029	-.22344	.06476	-.40758	-.03929

T-Test

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
GPx	KN	4	237.7203	26.09272	13.04636
	KP	4	439.5700	51.01988	25.50994

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
GPx	Equal variances assumed	4.254	.085	-7.045	6	.000	-201.84975	28.65248	-271.960	-131.740
	Equal variances not assumed			-7.045	4.469	.001	-201.84975	28.65248	-278.216	-125.484

T-Test

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Hispatologi	KN	4	1.3020	.07458	.03729
	KP	4	1.1100	.20494	.10247

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Hispatologi	Equal variances assumed	2.589	.159	1.761	6	.129	.19200	.10904	-.07482	.45882
	Equal variances not assumed			1.761	3.781	.157	.19200	.10904	-.11780	.50180

5.4. ANOVA Kadar MDA

Means

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
MDA * Interaksi	24	100.0%	0	.0%	24	100.0%

Report

MDA

Interaksi	Mean	N	Std. Deviation
KK2	2.5625	4	.24778
KP2	2.5477	4	.27518
KK5	2.7789	4	.14531
KP5	1.7711	4	.31319
KK9	2.9594	4	.16718
KP9	1.3383	4	.30435
Total	2.3263	24	.62936

Univariate Analysis of Variance

Warnings

Post hoc tests are not performed for Kurkumin because there are fewer than three groups.

Between-Subjects Factors

		Value Label	N
Kurkumin	1.00	KK	12
	2.00	KP	12
Lama	2.00	2 minggu	8
	5.00	5 minggu	8
	9.00	9 minggu	8

Levene's Test of Equality of Error Variances[a]

Dependent Variable: MDA

F	df 1	df 2	Sig.
.556	5	18	.732

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+Kurkumin+Lama+Kurkumin * Lama

Tests of Between-Subjects Effects

Dependent Variable: MDA

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	7.979[a]	5	1.596	25.406	.000
Intercept	129.880	1	129.880	2067.622	.000
Kurkumin	4.660	1	4.660	74.178	.000
Lama	.692	2	.346	5.506	.014
Kurkumin * Lama	2.628	2	1.314	20.919	.000
Error	1.131	18	.063		
Total	138.990	24			
Corrected Total	9.110	23			

a. R Squared = .876 (Adjusted R Squared = .841)

Post Hoc Tests

Lama Pemberian Kurkumin

Multiple Comparisons

Dependent Variable: MDA

Tukey HSD

(I) Lama	(J) Lama	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
2 minggu	5 minggu	.2801	.12532	.092	-.0397	.5999
	9 minggu	.4062*	.12532	.012	.0864	.7261
5 minggu	2 minggu	-.2801	.12532	.092	-.5999	.0397
	9 minggu	.1262	.12532	.582	-.1937	.4460
9 minggu	2 minggu	-.4062*	.12532	.012	-.7261	-.0864
	5 minggu	-.1262	.12532	.582	-.4460	.1937

Based on observed means.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

MDA

Tukey HSD[a,b]

Lama	N	Subset 1	Subset 2
9 minggu	8	2.1488	
5 minggu	8	2.2750	2.2750
2 minggu	8		2.5551
Sig.		.582	.092

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .063.

a. Uses Harmonic Mean Sample Size = 8.000.

b. Alpha = .05.

Post Hoc Tests

Multiple Comparisons

Dependent Variable: MDA

Tukey HSD

(I) Interaksi	(J) Interaksi	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
KK2	KP2	.01484	.17722	1.000	-.5484	.5781
	KK5	-.21641	.17722	.821	-.7796	.3468
	KP5	.79141*	.17722	.003	.2282	1.3546
	KK9	-.39687	.17722	.268	-.9601	.1663
	KP9	1.22422*	.17722	.000	.6610	1.7874
KP2	KK2	-.01484	.17722	1.000	-.5781	.5484
	KK5	-.23125	.17722	.779	-.7945	.3320
	KP5	.77656*	.17722	.004	.2133	1.3398
	KK9	-.41172	.17722	.235	-.9749	.1515
	KP9	1.20938*	.17722	.000	.6462	1.7726
KK5	KK2	.21641	.17722	.821	-.3468	.7796
	KP2	.23125	.17722	.779	-.3320	.7945
	KP5	1.00781*	.17722	.000	.4446	1.5710
	KK9	-.18047	.17722	.906	-.7437	.3828
	KP9	1.44063*	.17722	.000	.8774	2.0038
KP5	KK2	-.79141*	.17722	.003	-1.3546	-.2282
	KP2	-.77656*	.17722	.004	-1.3398	-.2133
	KK5	-1.00781*	.17722	.000	-1.5710	-.4446
	KK9	-1.18828*	.17722	.000	-1.7515	-.6251
	KP9	.43281	.17722	.194	-.1304	.9960
KK9	KK2	.39687	.17722	.268	-.1663	.9601
	KP2	.41172	.17722	.235	-.1515	.9749
	KK5	.18047	.17722	.906	-.3828	.7437
	KP5	1.18828*	.17722	.000	.6251	1.7515
	KP9	1.62109*	.17722	.000	1.0579	2.1843
KP9	KK2	-1.22422*	.17722	.000	-1.7874	-.6610
	KP2	-1.20938*	.17722	.000	-1.7726	-.6462
	KK5	-1.44063*	.17722	.000	-2.0038	-.8774
	KP5	-.43281	.17722	.194	-.9960	.1304
	KK9	-1.62109*	.17722	.000	-2.1843	-1.0579

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

MDA

Tukey HSD[a]

Interaksi	N	Subset for alpha = .05	
		1	2
KP9	4	1.3383	
KP5	4	1.7711	
KP2	4		2.5477
KK2	4		2.5625
KK5	4		2.7789
KK9	4		2.9594
Sig.		.194	.235

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

5.5. ANOVA Kadar GPx

Means

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
GPx * Interaksi	24	100.0%	0	.0%	24	100.0%

Report

GPx

Interaksi	Mean	N	Std. Deviation
KK2	265.7350	4	25.10423
KP2	325.0225	4	46.70029
KK5	144.8650	4	19.02507
KP5	256.4175	4	25.31192
KK9	121.5325	4	29.96259
KP9	137.8950	4	41.04682
Total	208.5779	24	83.97153

Univariate Analysis of Variance

Warnings

Post hoc tests are not performed for Kurkumin because there are fewer than three groups.

Between-Subjects Factors

		Value Label	N
Kurkumin	1.00	KK	12
	2.00	KP	12
Lama	2.00	2 minggu	8
	5.00	5 minggu	8
	9.00	9 minggu	8

Levene's Test of Equality of Error Variances[a]

Dependent Variable: GPx

F	df 1	df 2	Sig.
.820	5	18	.552

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+Kurkumin+Lama+Kurkumin * Lama

Tests of Between-Subjects Effects

Dependent Variable: GPx

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	142988.856[a]	5	28597.771	26.826	.000
Intercept	1044113.936	1	1044113.936	979.410	.000
Kurkumin	23363.184	1	23363.184	21.915	.000
Lama	110535.457	2	55267.729	51.843	.000
Kurkumin * Lama	9090.215	2	4545.107	4.263	.030
Error	19189.151	18	1066.064		
Total	1206291.943	24			
Corrected Total	162178.007	23			

a. R Squared = .882 (Adjusted R Squared = .849)

Post Hoc Tests

Lama Pemberian Kurkumin

Multiple Comparisons

Dependent Variable: GPx

Tukey HSD

(I) Lama	(J) Lama	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
2 minggu	5 minggu	94.7375*	16.32532	.000	53.0726	136.4024
	9 minggu	165.6650*	16.32532	.000	124.0001	207.3299
5 minggu	2 minggu	-94.7375*	16.32532	.000	-136.4024	-53.0726
	9 minggu	70.9275*	16.32532	.001	29.2626	112.5924
9 minggu	2 minggu	-165.6650*	16.32532	.000	-207.3299	-124.0001
	5 minggu	-70.9275*	16.32532	.001	-112.5924	-29.2626

Based on observed means.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

GPx

Tukey HSD[a,b]

Lama	N	Subset		
		1	2	3
9 minggu	8	129.7138		
5 minggu	8		200.6413	
2 minggu	8			295.3787
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = 1066.064.

a. Uses Harmonic Mean Sample Size = 8.000.

b. Alpha = .05.

Post Hoc Tests

Multiple Comparisons

Dependent Variable: GPx

Tukey HSD

(I) Interaksi	(J) Interaksi	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
KK2	KP2	-59.28750	23.08749	.156	-132.6603	14.0853
	KK5	120.87000*	23.08749	.001	47.4972	194.2428
	KP5	9.31750	23.08749	.998	-64.0553	82.6903
	KK9	144.20250*	23.08749	.000	70.8297	217.5753
	KP9	127.84000*	23.08749	.000	54.4672	201.2128
KP2	KK2	59.28750	23.08749	.156	-14.0853	132.6603
	KK5	180.15750*	23.08749	.000	106.7847	253.5303
	KP5	68.60500	23.08749	.075	-4.7678	141.9778
	KK9	203.49000*	23.08749	.000	130.1172	276.8628
	KP9	187.12750*	23.08749	.000	113.7547	260.5003
KK5	KK2	-120.87000*	23.08749	.001	-194.2428	-47.4972
	KP2	-180.15750*	23.08749	.000	-253.5303	-106.7847
	KP5	-111.55250*	23.08749	.002	-184.9253	-38.1797
	KK9	23.33250	23.08749	.908	-50.0403	96.7053
	KP9	6.97000	23.08749	1.000	-66.4028	80.3428
KP5	KK2	-9.31750	23.08749	.998	-82.6903	64.0553
	KP2	-68.60500	23.08749	.075	-141.9778	4.7678
	KK5	111.55250*	23.08749	.002	38.1797	184.9253
	KK9	134.88500*	23.08749	.000	61.5122	208.2578
	KP9	118.52250*	23.08749	.001	45.1497	191.8953
KK9	KK2	-144.20250*	23.08749	.000	-217.5753	-70.8297
	KP2	-203.49000*	23.08749	.000	-276.8628	-130.1172
	KK5	-23.33250	23.08749	.908	-96.7053	50.0403
	KP5	-134.88500*	23.08749	.000	-208.2578	-61.5122
	KP9	-16.36250	23.08749	.978	-89.7353	57.0103
KP9	KK2	-127.84000*	23.08749	.000	-201.2128	-54.4672
	KP2	-187.12750*	23.08749	.000	-260.5003	-113.7547
	KK5	-6.97000	23.08749	1.000	-80.3428	66.4028
	KP5	-118.52250*	23.08749	.001	-191.8953	-45.1497
	KK9	16.36250	23.08749	.978	-57.0103	89.7353

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

GPx

Tukey HSD[a]

Interaksi	N	Subset for alpha = .05	
		1	2
KK9	4	121.5325	
KP9	4	137.8950	
KK5	4	144.8650	
KP5	4		256.4175
KK2	4		265.7350
KP2	4		325.0225
Sig.		.908	.075

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

5.6. ANOVA Gambaran Histopatologi

Means

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Hispatologi * Interaksi	24	100.0%	0	.0%	24	100.0%

Report

Hispatologi

Interaksi	Mean	N	Std. Deviation
KK2	1.0100	4	.22949
KP2	1.0265	4	.14897
KK5	.9000	4	.17739
KP5	.8000	4	.16330
KK9	1.1700	4	.05033
KP9	1.1098	4	.11472
Total	1.0027	24	.18800

Univariate Analysis of Variance

Warnings

Post hoc tests are not performed for Kurkumin because there are fewer than three groups.

Between-Subjects Factors

		Value Label	N
Kurkumin	1.00	KK	12
	2.00	KP	12
Lama	2.00	2 minggu	8
	5.00	5 minggu	8
	9.00	9 minggu	8

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Hispatologi

F	df 1	df 2	Sig.
.781	5	18	.576

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+Kurkumin+Lama+Kurkumin * Lama

Tests of Between-Subjects Effects

Dependent Variable: Hispatologi

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.367[a]	5	.073	2.961	.040
Intercept	24.131	1	24.131	973.779	.000
Kurkumin	.014	1	.014	.555	.466
Lama	.339	2	.170	6.842	.006
Kurkumin * Lama	.014	2	.007	.283	.757
Error	.446	18	.025		
Total	24.944	24			
Corrected Total	.813	23			

a. R Squared = .451 (Adjusted R Squared = .299)

Post Hoc Tests

Lama Pemberian Kurkumin

Multiple Comparisons

Dependent Variable: Hispatologi

Tukey HSD

(I) Lama	(J) Lama	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
2 minggu	5 minggu	.1683	.07871	.110	-.0326	.3692
	9 minggu	-.1216	.07871	.294	-.3225	.0792
5 minggu	2 minggu	-.1683	.07871	.110	-.3692	.0326
	9 minggu	-.2899*	.07871	.005	-.4908	-.0890
9 minggu	2 minggu	.1216	.07871	.294	-.0792	.3225
	5 minggu	.2899*	.07871	.005	.0890	.4908

Based on observed means.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Hispatologi

Tukey HSD[a,b]

Lama	N	Subset 1	Subset 2
5 minggu	8	.8500	
2 minggu	8	1.0183	1.0183
9 minggu	8		1.1399
Sig.		.110	.294

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .025.

a. Uses Harmonic Mean Sample Size = 8.000.

b. Alpha = .05.

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Hispatologi

Tukey HSD

(I) Interaksi	(J) Interaksi	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
KK2	KP2	-.01655	.11131	1.000	-.3703	.3372
	KK5	.11000	.11131	.916	-.2438	.4638
	KP5	.21000	.11131	.441	-.1438	.5638
	KK9	-.16000	.11131	.705	-.5138	.1938
	KP9	-.09983	.11131	.942	-.4536	.2539
KP2	KK2	.01655	.11131	1.000	-.3372	.3703
	KK5	.12655	.11131	.860	-.2272	.4803
	KP5	.22655	.11131	.362	-.1272	.5803
	KK9	-.14345	.11131	.787	-.4972	.2103
	KP9	-.08328	.11131	.973	-.4370	.2705
KK5	KK2	-.11000	.11131	.916	-.4638	.2438
	KP2	-.12655	.11131	.860	-.4803	.2272
	KP5	.10000	.11131	.942	-.2538	.4538
	KK9	-.27000	.11131	.199	-.6238	.0838
	KP9	-.20983	.11131	.441	-.5636	.1439
KP5	KK2	-.21000	.11131	.441	-.5638	.1438
	KP2	-.22655	.11131	.362	-.5803	.1272
	KK5	-.10000	.11131	.942	-.4538	.2538
	KK9	-.37000*	.11131	.037	-.7238	-.0162
	KP9	-.30983	.11131	.106	-.6636	.0439
KK9	KK2	.16000	.11131	.705	-.1938	.5138
	KP2	.14345	.11131	.787	-.2103	.4972
	KK5	.27000	.11131	.199	-.0838	.6238
	KP5	.37000*	.11131	.037	.0162	.7238
	KP9	.06017	.11131	.994	-.2936	.4139
KP9	KK2	.09983	.11131	.942	-.2539	.4536
	KP2	.08328	.11131	.973	-.2705	.4370
	KK5	.20983	.11131	.441	-.1439	.5636
	KP5	.30983	.11131	.106	-.0439	.6636
	KK9	-.06017	.11131	.994	-.4139	.2936

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Hispatologi

Tukey HSD[a]

Interaksi	N	Subset for alpha = .05	
		1	2
KP5	4	.8000	
KK5	4	.9000	.9000
KK2	4	1.0100	1.0100
KP2	4	1.0265	1.0265
KP9	4	1.1098	1.1098
KK9	4		1.1700
Sig.		.106	.199

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

5.7. Uji Korelasi

Correlations

Correlations

		MDA	GPx	Hispatologi	Lama
MDA	Pearson Correlation	1	.765**	-.102	-.862**
	Sig. (2-tailed)		.004	.753	.000
	N	12	12	12	12
GPx	Pearson Correlation	.765**	1	-.212	-.915**
	Sig. (2-tailed)	.004		.508	.000
	N	12	12	12	12
Hispatologi	Pearson Correlation	-.102	-.212	1	.245
	Sig. (2-tailed)	.753	.508		.443
	N	12	12	12	12
Lama	Pearson Correlation	-.862**	-.915**	.245	1
	Sig. (2-tailed)	.000	.000	.443	
	N	12	12	12	12

**. Correlation is significant at the 0.01 level (2-tailed).